

REMARKS

In response to the Official Action of February 1, 2005, claims 1, 6 and 7 have been amended and new claims 12, 13 and 14 are submitted. For the reasons set forth below, it is respectfully submitted that with the amendment to claims 1, 6 and 7, the rejection of all of the claims based on prior art is overcome.

More particularly, with reference to paragraph 2 of the Official Action, claims 1-4 and 6-10 are rejected under 35 U.S.C. §102(b) in view of US patent 6,356,770, Ishida. Ishida is directed to a composite mobile communication device which can operate in different mobile communication systems such as both the personal handy phone system (PHS) and the personal digital cellular system (PDC) (see column 1, in the "Field of the Invention" section). Ishida discloses a dual-mode receiver which includes a local oscillation circuit for supplying two local oscillation signals for PHS and PDC. The dual-mode transmitter includes a local oscillation circuit for PHS and a local oscillation circuit for PDC (see column 1, lines 29-35 regarding the prior art and column 2, lines 8-14 regarding the Ishida disclosure). Ishida further states that in a PHS system the radio frequency (RF) stage needs two local oscillators which can generate different local frequencies. Thus, in a PHS/PDC-composite mobile terminal, a switch is provided in the PHS RF stage to select one of the two local oscillators for two slots of a one-frame-two-slot transmitter/receiver (T/R) assignment depending on which one of the two slots the current timing is (see column 1, lines 45-57).

As seen in Figure 1 of Ishida, a system is shown in which a first transceiver circuit 10A is provided for PHS and a second transceiver circuit 10B is provided for PDC, each including a local oscillator 104-3/109-3. The two frequencies required for a PHS receiver circuit 102 are provided by selecting between the local oscillation signal 104-3 generated in the PHS circuit 10A and a local oscillation signal 109-3 generated in the PDC circuit 10B through use of a local frequency selection switch 104-4 (see column 3, lines 5-37).

Amended claim 1 of the present application is believed to be distinguished over Ishida. In amended claim 1, one of the two voltage control oscillators (VCOs) is selected for providing a signal to a second local oscillator output such that the current consumption is minimized while system requirements are met. Support for the amendment to claim 1 which provides for VCO selection in a way that the current consumption of the system is reduced is disclosed in the application as originally filed including at page 7, line 9 through page 8, line 4. It is therefore respectfully submitted that the disclosed phase-locked loop structure defined in amended claim 1 which provides for the advantageous selection criteria with regard to the voltage controlled oscillator having a lower current consumption, is neither disclosed nor suggested in Ishida. In Ishida, switch 104-4 associated with the PHS circuit merely uses the output of the frequency multiplier 120 associated with the first local oscillator 109-3 of the PDC circuit 10B for the one slot timing of the one-frame-two-slot T/R assignment (see column 3, lines 31-34) (please note that the PDC receive circuit 107 shown in Figure 1 of Ishida is erroneously labelled as the PHS receive circuit but is properly identified in the patent at column 3, line 16). Thus, it is respectfully submitted that amended claim 1 is distinguished over Ishida and therefore claims 2-4 are also believed to be neither anticipated nor suggested by Ishida.

Independent method claim 7 has been amended in a manner similar to that for claim 1 and for similar reasons, the method defined therein wherein a signal is selected which is output by the voltage controlled oscillator having a lower current consumption, whenever the signal output is able to fulfill system requirements on the second local oscillator signal for a currently selected one of the modes, is believed to be neither disclosed nor suggested by Ishida. It is therefore respectfully submitted that dependent claims 8-10 are also neither anticipated nor suggested by Ishida.

Amended claim 6 of the present invention is directed to a communication unit comprising a transmitter chain requiring a local oscillator signal for processing signals for transmission, wherein said transmitter chain enables a multimode system transmission, as well as a receiver chain requiring a local oscillator signal for processing received signals, wherein the receiver

chain enables a multimode system reception. Amended claim 6 further recites that the first local oscillator output for providing a first local oscillator signal is for at least one of the modes and that the second local oscillator output for providing a second local oscillator signal is for a selectable one of the modes. The amendment to claim 6 is supported in the original specification at page 12, line 24 through page 13, line 2. A multimode system as set forth in amended claim 1 that requires a single receiver chain and a single transmitter chain allows, for example, for saving components and also enables, for example, a simple integrated solution. It further allows, for example, using performance optimized phase-locked loops (PLLs). Such multimode receiver and transmitter chains are not disclosed or suggested in Ishida. In Ishida, separate transceiver circuits (10A, 10B) are disclosed for the two modes of operation which in Ishida are PHS and PDC. The transceiver circuit 10A only enables different frequencies for reception time slots of a single frame in PHS mode. It is therefore respectfully submitted that amended claim 6 reciting a transmitter chain which enables a multimode system transmission and a receiver chain which enables multimode system reception and the first local oscillator output for providing a first local oscillator signal for at least one of said modes and a second local oscillator output for providing a second local oscillator signal for a selectable one of said modes is neither disclosed nor suggested by Ishida.

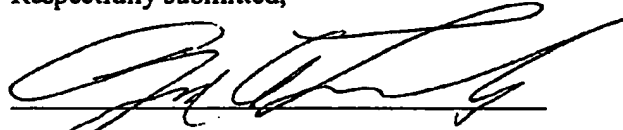
Newly submitted claim 12 is dependent upon amended claim 6 and states that the selection component is arranged for forwarding to the second local oscillator output a signal which is output by the voltage controlled oscillator having a lower current consumption, whenever the signal is able to fulfill system requirements on the second local oscillator signal for a currently selected one of the modes. Support for claim 12 is presented in the originally disclosed specification at page 7, line 9 through page 8, line 4. Therefore newly submitted claim 12 is believed to be distinguished over Ishida.

At paragraph 3 of the Official Action, it is noted that claims 5 and 11 were only objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim. Claims 5 and 11 are

presented in dependent form and are also presented in independent form as new claims 13 and 14 respectively. Dependent claims 5 and 11 are believed to be allowable since the claims from which they respectively depend (claims 1 and 7) incorporate additional limitations which are believed to distinguish these base claims over the prior art. New claims 13 and 14 are original claims 5 and 11 written in independent form, incorporating all of the limitations of their respective base claim.

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,



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